

MATERIAL SAFETY DATA SHEET

Ashland

Page 001

Date Prepared: 06/07/06

Date Printed: 01/02/07

MSDS No: 999.0004340-012.003

XYLENE

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity

Product Name: XYLENE

General or Generic ID: AROMATIC HYDROCARBON

Company

Ashland
Ashland Distribution Co. &
Ashland Specialty Chemical Co.
P. O. Box 2219
Columbus, OH 43216
614-790-3333

Emergency Telephone Number:

1-800-ASHLAND (1-800-274-5263)
24 hours everyday

Regulatory Information Number:
1-800-325-3751

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Ingredient(s) | CAS Number | % (by weight) |
|---------------|------------|---------------|
| XYLENE | 1330-20-7 | 100.0-100.0 |
| ETHYLBENZENE | 100-41-4 | 20.0- 20.0 |
| TOLUENE | 108-88-3 | 1.0- 1.0 |

3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye

May cause mild eye irritation. Symptoms include stinging, tearing, and redness. Additional symptoms of eye exposure may include: blurred vision.

Skin

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Additional symptoms of skin contact may include: skin blistering. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

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Swallowing

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

Inhalation

Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: redness of the face and neck, mouth and throat irritation (soreness, dry or scratchy feeling, cough), stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), tight feeling in the chest, central nervous system excitation (giddiness, liveliness, light-headed feeling) followed by central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness) and other central nervous system effects, effects on memory, respiratory depression (slowing of the breathing rate), shortness of breath, loss of coordination, confusion, irregular heartbeat, narcosis (dazed or sluggish feeling), coma.

Target Organ Effects

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: testis damage, kidney damage, liver damage, effects on hearing. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: central nervous system effects.

Developmental Information

This material (or a component) may be harmful to the human fetus based on positive test results with laboratory animals.

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Cancer Information

Ethylbenzene has been shown to cause cancer in laboratory animals. The relevance of this finding to humans is uncertain. The International Agency for Research on Cancer (IARC) has classified ethylbenzene as a possible human carcinogen.

Other Health Effects

No data

Primary Route(s) of Entry

Inhalation, Skin absorption, Skin contact, Eye contact, Ingestion.

4. FIRST AID MEASURES

Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

Swallowing

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

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Note to Physicians

Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 3 - Swallowing) when deciding whether to induce vomiting. Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), liver, kidney, central nervous system, male reproductive system, auditory system. Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

5. FIRE FIGHTING MEASURES

Flash Point

80.0 F (26.6 C) TCC

Explosive Limit

(for product) Lower 1.0 Upper 6.6 %

Autoignition Temperature

980.0 F (526.6 C)

Hazardous Products of Combustion

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Fire and Explosion Hazards

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

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Extinguishing Media

regular foam (such as AFFF), water fog, carbon dioxide, dry chemical.

Fire Fighting Instructions

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).

NFPA Rating

Health - 2, Flammability - 3, Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Small Spill

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

Large Spill

Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Stop spill at source. Prevent from entering drains, sewers, streams or other bodies of water. Prevent from spreading. If runoff occurs, notify authorities as required. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

7. HANDLING AND STORAGE

Handling

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding

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during product transfer as described in National Fire Protection Association document NFPA 77. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Warning. Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

Storage

Store in a cool, dry, ventilated area. Keep containers closed when not in use. Do not store near extreme heat, open flame, or sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (see exposure guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

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Engineering Controls

Provide sufficient mechanical (general and/or local exhaust)
ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

XYLENE (1330-20-7)

OSHA PEL 100.000 ppm - TWA

OSHA VPEL 100.000 ppm - TWA

OSHA VPEL 150.000 ppm - STEL

ACGIH TLV 100.000 ppm - TWA

ACGIH TLV 150.000 ppm - STEL

OTHER LIMIT 46.000 ppm - TWA

ETHYLBENZENE (100-41-4)

OSHA PEL 100.000 ppm - TWA

OSHA VPEL 100.000 ppm - TWA

OSHA VPEL 125.000 ppm - STEL

ACGIH TLV 100.000 ppm - TWA

ACGIH TLV 125.000 ppm - STEL

TOLUENE (108-88-3)

No exposure limits established

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point

(for product) 279.0 F (137.2 C) @ 760 mmHg

Vapor Pressure

(for product) 9.000 mmHg @ 68.00 F

Specific Vapor Density

3.660 @ AIR=1

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Specific Gravity

.870 @ 60.00 F

Liquid Density

7.250 lbs/gal @ 60.00 F

.870 kg/l @ 16.00 C

Percent Volatiles

100.0 %

Volatile Organic Compounds (VOC)

100.000 %

870.000 g/l

7.250 lbs/gal

Evaporation Rate

.86 (N-BUTYL ACETATE)

Appearance

CLEAR COLORLESS LIQUID

State

LIQUID

Physical Form

NEAT

Color

CLEAR, APHA COLOR 15 MAX

Odor

LIGHT AROMATIC

pH

No data

Viscosity

.7 cps

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Freezing Point

-54.0 F (-47.7 C)

Molecular Weight

106.0

Solubility in Water

LESS THAN 0.08 %

Octanol/Water Partition Coefficient

3.120 - 3.200

Heat Value

18445.000 BTU

Bulk Density

.970 lbs/ft3

10. STABILITY AND REACTIVITY

Hazardous Polymerization

Product will not undergo hazardous polymerization.

Hazardous Decomposition

May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability

Stable.

Incompatibility

Avoid contact with: strong oxidizing agents.

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11. TOXICOLOGICAL INFORMATION

No data

12. ECOLOGICAL INFORMATION

No data

13. DISPOSAL CONSIDERATION

Waste Management Information

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution Company, IC&S Environmental Services Group at 800-531-7106.

14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101

DOT Description:

XYLENES, 3, UN1307, III

Container/Mode:

55 GAL DRUM/TRUCK PACKAGE

NOS Component:

None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs) Component

| | |
|------|------------------------------|
| 100 | XYLENES (O-, M-, P- ISOMERS) |
| 5000 | ETHYLBENZENE |

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Other Transportation Information

The Transport Information may vary with the container and mode of shipment.

15. REGULATORY INFORMATION

US Federal Regulations

TSCA (Toxic Substances Control Act) Status

TSCA (UNITED STATES) The intentional ingredients of this product are listed.

CERCLA RQ - 40 CFR 302.4(a)

| Component | RQ (lbs) |
|------------------------------|----------|
| XYLENES (O-, M-, P- ISOMERS) | 100 |
| ETHYLBENZENE | 1000 |

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive() Sudden Release of Pressure()

SARA 313 Components - 40 CFR 372.65

| Section 313 Component(s) | CAS Number | % |
|--------------------------|------------|--------|
| XYLENE (MIXED ISOMERS) | 1330-20-7 | 100.00 |
| ETHYLBENZENE | 100-41-4 | 22.00 |

OSHA Process Safety Management 29 CFR 1910

None listed

EPA Accidental Release Prevention 40 CFR 68

None listed

International Regulations

Inventory Status

AICS (AUSTRALIA) The intentional ingredients of this product are listed.

DSL (CANADA) The intentional ingredients of this product are listed.

ECL (SOUTH KOREA) The intentional ingredients of this product are listed.

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EINECS (EUROPE) The intentional ingredients of this product are listed.

ENCS (JAPAN) The intentional ingredients of this product are listed.

IECSC (CHINA) The intentional ingredients of this product are listed.

PICCS (PHILIPPINES) The intentional ingredients of this product are listed.

State and Local Regulations

California Proposition 65

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause cancer.

ETHYL BENZENE

BENZENE

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the state of California to cause reproductive harm.

TOLUENE

BENZENE

New Jersey RTK Label Information

XYLENES

1330-20-7

ETHYL BENZENE

100-41-4

Pennsylvania RTK Label Information

BENZENE, DIMETHYL-

1330-20-7

BENZENE, ETHYL-

100-41-4

16. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

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SOURCE:ASHLAND INC WTR, EASYWTR